

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 04-05-2009		2. REPORT TYPE FINAL		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE Persistent Airpower for Unconventional Warfare: Revamping AFCENT's Operational Design		5a. CONTRACT NUMBER			
		5b. GRANT NUMBER			
		5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S) Lee G. Gentile, Jr., Maj, USAF Paper Advisor (if Any): N/A		5d. PROJECT NUMBER			
		5e. TASK NUMBER			
		5f. WORK UNIT NUMBER			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Office of the Provost Naval War College 686 Cushing Road Newport, RI 02841-1207		8. PERFORMING ORGANIZATION REPORT NUMBER			
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)			
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)			
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution Statement A: Approved for public release; Distribution is unlimited.					
13. SUPPLEMENTARY NOTES A paper submitted to the Provost, Naval War College, for consideration in the Prize Essay Competition in the Military Officers Association of America category. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.					
14. ABSTRACT The recent presidential decision to end U.S. combat operations in Iraq in August 2010 moves Operation Iraqi Freedom from stability operations to enabling Iraqi civil authority. However, even though the Iraqi Army will assume responsibility for defense, the Iraqi Air Force is not ready to assume control of air operations. Consequently, the U.S. will be required to provide the Iraqi Army and U.S. advisors with air support. Yet, why must U.S. airpower remain behind? The answer lies in U.S. Air Forces Central's (AFCENT) operational design. By tracing the history from the Second World War to Operation Iraqi Freedom, one will see that airpower has played a significant role in both conventional and unconventional operations. However, AFCENT's current construct is based on the lessons learned during conventional, not unconventional operations. Therefore, AFCENT should adopt an unconventional operational design to provide ground forces with persistent airpower during stability operations while preparing the host nation's air force to assume control of air defense.					
15. SUBJECT TERMS Unconventional Warfare, Counterinsurgency, Airpower, Combined Arms, Operational Design					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 25	19a. NAME OF RESPONSIBLE PERSON
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED			19b. TELEPHONE NUMBER (include area code)

NAVAL WAR COLLEGE
Newport, RI



Persistent Airpower for Unconventional Warfare: Revamping AFCENT's Operational Design.

By

Lee G. Gentile

Maj, USAF

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____

Date: May 14, 2009

Table of Contents

Introduction	1
Background	2
Discussion and Analysis	4
Analytical Conclusions	9
Recommendations	12
Conclusion	16
Selected Bibliography	20

List of Illustrations

Figure 1: Joint Publication 5-0 Phasing Model.....	1
Figure 2: Map of Malaya during the Emergency	6
Figure 3: Unconventional Warfare Airpower Construct.....	13

Abstract

Persistent Airpower for Unconventional Warfare: Revamping AFCENT's Operational Design.

The recent presidential decision to end U.S. combat operations in Iraq in August 2010 moves Operation Iraqi Freedom from stability operations to enabling Iraqi civil authority. However, even though the Iraqi Army will assume responsibility for defense, the Iraqi Air Force is not ready to assume control of air operations. Consequently, the U.S. will be required to provide the Iraqi Army and U.S. advisors with air support. Yet, why must U.S. airpower remain behind? The answer lies in U.S. Air Forces Central's (AFCENT) operational design. By tracing the history from the Second World War to Operation Iraqi Freedom, one will see that airpower has played a significant role in both conventional and unconventional operations. However, AFCENT's current construct is based on the lessons learned during conventional, not unconventional operations. Therefore, AFCENT should adopt an unconventional operational design to provide ground forces with persistent airpower during stability operations while preparing a host nation's air force to assume control of air defense.

Introduction

In August 2010, major combat operations in Iraq will end and U.S. forces will transition from stability operations¹ to enabling the Iraqi government.² This means that the Iraqi Military and Police will assume responsibility for defending Iraq and U.S. forces will redeploy. However, as responsibility for security transfers to Iraqi Forces, the Iraqi Air Force (IqAF) will not be ready to assume control of the full spectrum of air operations. Therefore, the U.S. will continue to provide air support to Iraqi units and U.S. advisors in the counter-insurgency (COIN) fight.

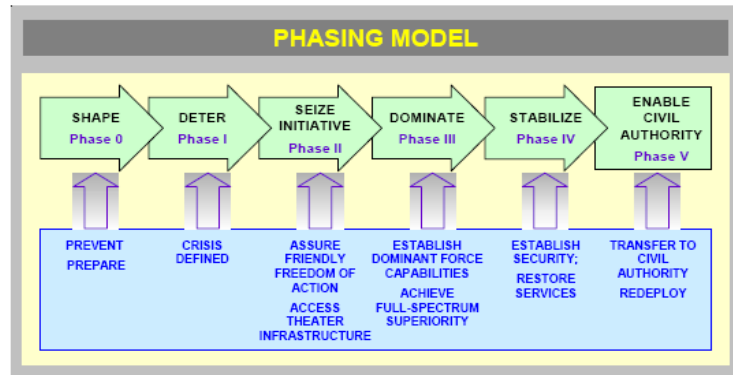


Figure 1: Joint Publication 5-0 Phasing Model

However, why must U.S. Air Forces Central (AFCENT) continue to provide air support to the Iraqi Army? The answer lies in AFCENT's current operational design.³ AFCENT's command and control structure and its air wings were designed for the dominate phase of conventional warfare⁴ not stability operations or unconventional warfare (UW).⁵ Although AFCENT's centralized command and control structure and large air wings provide consistent airpower to ground commanders, it is not optimal. Furthermore, the IqAF's inability to execute the full range of air operations highlights the most significant drawback to AFCENT's current operational design, no ability to conduct foreign internal defense.

In order to improve AFCENT's operational design, one must revisit the lessons learned during past COIN and UW operations. In Algeria, the French improved airpower's speed and responsiveness by deploying small, composite air units through out the area of

operation (AO), while using a tactical reserve to maintain the ability to mass airpower. Furthermore, the Portuguese combined air-ground teams improved integration and flexibility during operations in Angola. Moreover, the U.S. Single Integrated Attack Team (SIAT) concept from Vietnam highlighted the importance of detailed air-ground planning and the improvements in airpower's response time and effectiveness by increasing the pilots' familiarity with the AO. Lastly, the "Jungle Jim" program in Laos stressed the importance of advisory units integrating indigenous forces into operations as the foundation of an exit strategy. Therefore, by adopting an unconventional operational design, AFCENT can increase the persistence, effectiveness, and efficiency of airpower in the Central Command area of responsibility (AOR).

Background

AFCENT's current operational design consists of large air wings and a centralized command and control structure, which evolved from the successes and failures of major conventional operations. First, air wings emerged from the Second World War as the primary air combat element because they were the most effective means of massing airpower on heavily defended targets. Furthermore, centralized command and decentralized execution evolved from the command and control failures of the North African Campaign during the Second World War and the Vietnam War. These concepts, which are the foundation of AFCENT's operational design, optimize airpower's effectiveness during the dominate phase of conventional operations not UW or stability and transition operations.

During the Second World War, the U.S. Air Force maintained large fighter and bomber bases in England in order to attack heavily defended targets deep inside the Third Reich. This construct allowed the Allied high command to assign targets to a wing, which

would review the target and the threat and develop a tactical plan to destroy the target. Because of the inaccuracy of high-altitude bombing during the Second World War, these plans often required massive aircraft formations (often exceeding 100 aircraft) in order to be successful.⁶ These large-scale conventional attacks indoctrinated the concept of the air wing as the primary air combat element (similar to the army's use of the division as the primary ground combat element) and were reinforced by successful conventional operations in Korea, Desert Storm, and Operation Iraqi Freedom. However, Vietnam highlighted that the conventional construct was not the most effective and efficient use of airpower in a COIN operation. Nevertheless, the ongoing conventional war in the north overshadowed the need to adjust the model to fight the insurgency in the south. Because large-scale conventional operations dominated the early years of the U.S. Air Force's development, the air wing emerged as the primary air combat element.

Moreover, the concept of centralized command and decentralized execution stems from the command and control failures of the North African Campaign during the Second World War and Vietnam.⁷ During the North African Campaign, 12th Air Force supported U.S. forces while the Royal Air Force's Eastern Air Command supported British troops, creating command, control, and unity of effort problems.⁸ Furthermore, during Vietnam, there was no single air commander for the AOR; the commanders of 13th Air Force, 7th Air Force, 7th Fleet, Strategic Air Command, and the III Marine Amphibious Forces each retained control of their own air assets in order to execute their air operations, thus inhibiting unity of effort and the ability to mass airpower.⁹ These parallel command structures generated command and control problems; limited the ability to mass airpower; and prevented unity of efforts amongst the air forces. Consequently, in the post-Vietnam era, the U.S. Air

Force fought to establish the current C/JFACC construct so a single commander controls all of the air assets in theater in order to maximize effectiveness and efficiency.¹⁰

Due to their complexity, conventional operations require a command and control structure that is centrally controlled and decentrally executed in order to maximize airpower's effectiveness and efficiency. Furthermore, the centralized command, decentralized execution concept rests on the air wings' ability to plan and execute large-scale attacks. These concepts, forged from the successes and failures of major combat operations, are extremely relevant during conventional operations. However, these concepts may not be the optimal means of employing airpower in an unconventional war.

Discussion and Analysis

Since the incorporation of airpower into military operations, aircraft have supported UW and COIN operations. During these operations, countries have used two constructs. The first construct consisted of several smaller, forward bases where air forces integrated with the ground troops and worked as part of a joint air-ground team. In contrast, the second construct resembles the U.S.'s current conventional war design where aircraft, based at large, rear-area facilities and controlled by higher headquarters, flew long-range air interdiction (AI) and close air support (CAS) sorties to contain the insurgency. Furthermore, advances in technology, such as air-to-air refueling and the internet, make AFCENT's conventional warfare construct more effective during UW operations. However, AFCENT's current conventional construct often requires aircraft to fly for several hours waiting for a tasking to an area that they are, most likely, unfamiliar with. Therefore, the UW airpower model provides a more persistent, effective, and efficient architecture for stability and transition operations.

During the French-Algerian War, the French used a decentralized airpower model to support COIN operations throughout Algeria. Algeria was France's second COIN operation in a decade, Vietnam was the first. Vietnam taught the French that propeller aircraft, such as the T-6, T-28, P-47, and A-1, were more effective than high-performance fighter aircraft.¹¹ Propeller aircraft were not only cheaper, sturdier, and easier to maintain than jet aircraft, they could also loiter over the battlefield longer and operate from austere airstrips. However, unlike the insurgency in Indochina where the French fought large concentrations of Viet Minh, the French forces did not face large concentrations of insurgents in Algeria. This allowed the French to deploy small detachments of aircraft throughout Algeria, allowing a few aircraft to respond quickly as opposed to a large number of aircraft responding slowly.¹² Hence, this decentralized airpower construct improved airpower's efficiency and responsiveness.

Furthermore, during the 1960s conflict in Angola, the Portuguese shifted their army and air force from a conventionally oriented force to a combined-arms model focused on COIN. In order to increase integration and persistence, the Portuguese established 403 airfields throughout Angola so a composite force of light attack and utility aircraft could forward deploy with ground forces.¹³ The forward-deployed composite force allowed the Portuguese Air Force to adjust the mix of aircraft in the attack packages in order to meet the ground commander's need for airlift, casualty evacuation, close air support, and reconnaissance. Hence, the Portuguese Air Force demonstrated how a composite force and close air-ground coordination improved airpower's flexibility and effectiveness.

Additionally, the U.S. Air Force conducted UW advisory and reconnaissance operations during Vietnam. Heinie Aderholt and the Air Commandos flew with the Laotian

and South Vietnamese Air Forces in order to teach them how to use airpower to support their army's COIN operations.¹⁴ Although it may have been easier for the U.S. to provide the Laotians and South Vietnamese Armies with air support, the Air Commandos believed that long-term success was dependant on improving the capacity and capability of the host nation's forces.¹⁵ Currently, the 6th Special Operations Squadron (6 SOS) is DOD's only organization that trains foreign countries how to use airpower for UW operations.¹⁶ Although the 6 SOS has provided expertise to over 26 countries since 11 September 2001, it is a small squadron composed of 109 Air Force personnel. Despite its small size, the 6 SOS has been very successful finding the right mix of technology, training, and support to provide a HN with affordable, sustainable, and capable airpower.¹⁷ Furthermore, the ability to provide a HN with advice during the shaping¹⁸ phase of operations provides access to a countries infrastructure and helps integrate host nation air forces into U.S. operations.¹⁹

However, some would argue that the British model during the Malayan Emergency and the U.S. model in Iraq and Afghanistan demonstrate that a conventional construct is capable of defeating an insurgency.²⁰ In Malaya, the British based their air forces at three main bases, Butterworth in the north, Kuala Lumpur in the central area, and Singapore in the south. The British air control concept used this model because the other airfields in Malaya could not support the heavy



Figure 2: Map of Malaya during the Emergency

bombers and fighters operated by the Royal Air Force (RAF).²¹ Because the RAF attack aircraft could not forward locate with ground forces, coordination with ground forces was limited and aircraft traveled long distances to the target area. Coordination and loiter time problems relegated most missions to preplanned AI instead of “on-call” CAS.²² However, despite the reliance on AI missions, the RAF was successful in denying insurgents the use of large areas of Malaya.²³

The U.S. has overcome the RAF’s loiter time and coordination problems using air-to-air refueling (AAR) and the internet. Similar to the situation the British faced in Malaya, the airfields in Iraq are not suitable for all U.S. aircraft. Therefore, the U.S. bases aircraft inside and outside of Iraq and uses tankers to negate the fuel and limited on-station time issues associated with long lines of operation. Furthermore, with aircraft spread throughout the CENTCOM AOR, the air operations center (AOC) must control aircraft tasking to meet the joint force commander’s (JFC) needs. The current system allows the ground commander to submit air strike requests (ASR) to the AOC for approval in accordance with Joint Publication 3-09.3.²⁴ The AOC processes and fills the request using any available aircraft in the AOR. Using the internet, the AOC sends the ASR to the pilots supporting the mission. Additionally, the supported ground forces can send detailed briefs and maps to the pilots via email. Therefore, AFCENT uses technology to solve the loiter time and coordination issues caused by basing aircraft at central locations throughout the AOR, eliminating the need to change the current command and control architecture.

Albeit true that AAR and the internet address the loiter time and coordination problems, they are not the most effective or efficient method of employing airpower in a UW or COIN operation. First, the use of tankers and airborne attack aircraft is costly in terms of

fuel, maintenance, and airframe life. In 2008, rising oil prices nearly doubled the operating cost associated with jet fighter combat air patrols and AAR, straining the U.S. Government's budget. Furthermore, RAF AI and CAS sorties were only marginally successful during the Malayan Emergency. The lack of detailed knowledge of the ground forces' operating area hampered the pilots' ability to identify and engage targets, which allowed the insurgents to escape.²⁵ However, while attack aircraft made minimal impact, forward-deployed small cargo aircraft and helicopters were extremely effective. The forward-deployed lift assets allowed ground commanders to use airborne insertion and aerial resupply to capitalize on the flexibility of airpower to gain and maintain the initiative.²⁶ Therefore, even though the RAF's consolidated fighter and bomber forces were marginally effective, the dispersed airlift assets enhanced the effectiveness of the ground forces.

Second, coordination via the internet does not allow pilots to clarify the ground situation in unfamiliar areas. Furthermore, the imagery associated with most of the mission planning software, like FalconView, is more than two-years old and does not provide pilots with recent changes to the landscape. Without consistent exposure to an area, one cannot recognize changes in the environment.²⁷ Therefore, pilots must consistently fly in the same AOR in order to develop that familiarity.

Lastly, the current AFCENT architecture is not optimal for UW operations. The current air tasking order (ATO) is a time-based product with a 72-hour cycle, where ASRs are assigned to aircraft 12 hours prior to execution. However, UW operations are not time based; they are event based and often occur on short notice because of tips and reports from the field. The event-based nature of UW operations requires short-notice, fluid planning and execution at the lower echelons. These short planning and execution timelines require pilots to

coordinate directly with the supported ground forces in order to increase the persistence and effectiveness of airpower.²⁸ Although the current ATO process provides a mechanism for immediate tasking, this normally results in pilots diverting to an unfamiliar area where friendly forces are in close proximity to the enemy, significantly increasing the risk of collateral damage and fratricide.²⁹ Even though AAR and the internet help mitigate command and control, loiter time, and coordination problems, airpower is more effective and efficient if air and ground forces base together.

Since its inception, airpower has played a role in small wars against insurgents and terrorists. However, some operational constructs have been more effective and efficient than others. The RAF's centralized fighter/bomber construct in Malaya highlights how distance degraded offensive airpower, while forward deployed airlift worked as a force multiplier. Conversely, France's dispersed construct in Algeria and Portugal's combined-arms COIN model in Angola demonstrated airpower's impact when small numbers of light attack and utility aircraft were deployed with ground forces throughout the AOR. Furthermore, while advances in technology help mitigate problems associated with the centralized airpower construct, a decentralized construct is more effective, efficient, and persistent for UW and COIN operations.

Analytical Conclusions

Analysis of previous UW and COIN operations provide the following conclusions: (1) forward deploying aircraft improves air-ground integration, (2) continual exposure to the same AO increases pilot situational awareness, (3) composite air units increase flexibility, (4) decentralized control and execution improves airpower's speed and flexibility, (5) a tactical reserve provides air commanders with the ability to mass airpower, (6) UW air units can

conduct foreign internal defense. Using these concepts, one can develop an effective and efficient UW airpower model.

First, forward deploying air units with the supported ground forces creates a well-integrated joint team. By allowing the ground commanders, the joint terminal air controllers (JTACs), and the pilots to plan the operation together, airpower is fully integrated into the operational scheme instead of being added at the end. This allows the joint air-ground team to develop reconnaissance patterns, areas of interest, and tactical reference points; all of which translates into expediting ordnance on target while reducing collateral damage and fratricide.³⁰ This concept is similar to the Single Integrated Attack Team from Vietnam, where JTACs used reconnaissance and strike aircraft in support of small ground teams to find and engage the Viet Cong in a counterinsurgency similar to what U.S. and coalition forces are currently facing in Iraq and Afghanistan.³¹

Second, pilots become extremely familiar with the AOR. Continual exposure to the same area allows pilots to identify and report things that are out of the ordinary, such as new enemy lines of communication, enemy concentrations, and disturbances in patrol areas (such as unusual vehicles or disturbances in the roads).³² Furthermore, familiarity with an area allows pilots to discriminate quickly between suitable and unsuitable targets, decreasing the time required to engage a target.³³

Third, a composite air unit provides more flexibility to air and ground commanders. The composite concept can be traced back to the Second World War, where John R. Alison and Philip G Cochran created the Army Air Force's first air commando unit. This unit was a self-contained air group that consisted of fighters, bombers, transports, gliders, helicopters, and light planes and was used to support the British "Chindit" jungle fighters in Burma.³⁴ The

composite unit allows the air commander to mix reconnaissance, airlift, and attack aircraft into a tailored force to meet the ground commander's airpower needs.³⁵

Fourth, decentralizing the planning and control of airpower provides the joint air-ground force with the speed and flexibility to engage a distributed, decentralized foe. In the 1940s, the Marine Corps' *Small Wars Manual* identified the need to match the enemy's decentralization using a decentralized and fluid command structure and the employment of small, independent striking units.³⁶ Additionally, the *Small Wars Manual* highlighted that pilots must have greater latitude in estimating a situation on the ground because the rapidly moving situation will not permit delay in the transmission of information to headquarters, but requires immediate positive action on the part of the aircraft commander.³⁷

Fifth, tactical reserves are required to increase force strength in order to support large-scale operations or situations requiring urgent reinforcement of front-line units in contact with the enemy. The French airpower construct in Algeria employed this concept. The French divided Algeria into three tactical air commands, which were further subdivided into four geographical divisions, for a total of twelve zones. There were twelve air units, one for each zone, and three reserve units, one for each tactical air command. Based upon operational needs, the French moved the reserve units between zones in order to mass airpower.³⁸

Sixth, FID improves the U.S. and HN long-term strategy; reduces HN reliance on the U.S.; and bolsters HN legitimacy by limiting the size and duration of U.S. presence.³⁹ Developing a capable HN air force takes considerable time, resources, and manpower because of the training required to qualify aircrews, maintenance personnel, and other specialists.⁴⁰ Therefore, in order to conduct aviation-FID (A-FID)⁴¹ on the scale of Iraq or Afghanistan, several A-FID qualified squadrons are required.

Historical UW case studies provide several lessons for employing airpower in unconventional operations. First, forward deploying aircraft improves air-ground integration and pilot battle-space awareness. Furthermore, composite squadrons and decentralized command and control increase airpower's flexibility and response time. Additionally, a tactical reserve maintains the ability to mass airpower. Lastly, a UW squadron has the capacity and capability to train indigenous forces, which contributes to a successful exit strategy. Melding these concepts into an operational design provides more persistent airpower during unconventional operations.

Recommendations

Increasing the effectiveness, efficiency, and persistence of AFCENT during stability and transition operations requires a bottom-up approach that differs from the employment of airpower under the current operational design. First, the large air wings should be broken into several, small detachments operating from multiple forward operating bases (FOB). Additionally, squadrons become a support organization that provides logistics and maintenance to the detachments, controls a tactical reserve detachment, and plans and coordinates with the brigade command element. Furthermore, the air group provides logistics and maintenance to the squadrons, controls a tactical reserve, and plans and coordinates with the division command element. Moreover, the Theater Air Control System shifts from a central command and control construct to a decentralized model. Lastly, the UW air units must be properly equipped and trained for variable-scale A-FID, providing AFCENT with the ability to incorporate a host nation's air force into stability operations in preparation for responsibility transfer. This construct would allow AFCENT to deploy UW groups to an AO

during the end of the dominate phase in order to provide U.S. forces with persistent airpower while preparing the HN to assume responsibility for defense.

Instead of one or two large airbases in the AOR, aircraft are divided into several detachments that serve as the core organization of the UW airpower construct. A UW detachment would be a scalable, composite organization consisting of 2-4 light attack aircraft, 1-3 light transport aircraft, 1-2 reconnaissance aircraft (manned or unmanned), and a small maintenance crew (15-30 personnel)

that can service and fix minor mechanical problems on all of the aircraft. The detachment would be stationed with the supported ground unit to facilitate planning and executing operations. This creates a joint air-ground team that is

designed to plan and execute UW operations effectively and efficiently.

Moreover, the role of the squadron changes from a primary tactical war-fighting element to more of a maintenance and logistics provider, tactical reserve, and brigade command element liaison. Because detachments are deployed throughout the AOR, their maintenance and logistics capability will be minimal. Therefore, the squadron, which is stationed at a larger base, will serve as the maintenance and logistics depot. This hub-and-spoke method allows the squadron to either fly parts and repair teams to the FOBs or bring detachment aircraft to the squadron.

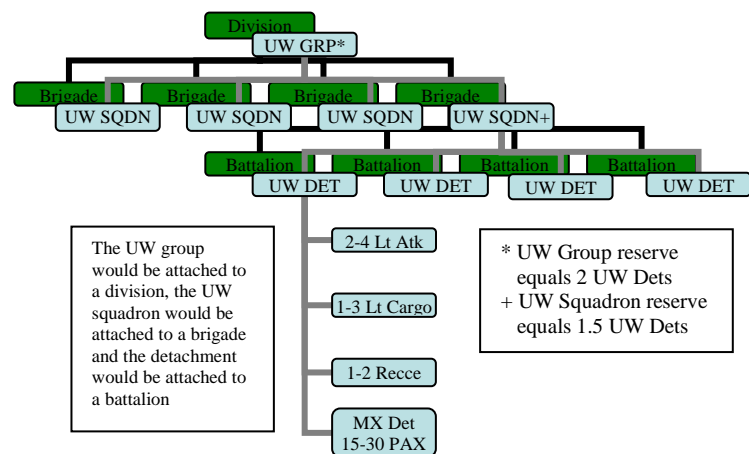


Figure 3: Unconventional Warfare Airpower Construct

Additionally, the squadron would also control a tactical reserve detachment for supporting large-scale operations or reinforcing a detachment if a troops-in-contact⁴² situation evolved into a larger battle. Similar to the current ground-CAS alert concept, aircraft would be placed on 15-minute alert in case a situation requires additional assistance. Therefore, the tactical reserve detachment provides field commanders with a mechanism for increasing their combat power quickly.

Furthermore, the squadron will also be responsible for liaising with the brigade. Daily contact between the squadron commander, the brigade command element, and the air liaison officer provides insight into the ground scheme of maneuver. This allows the squadron to anticipate the commitment of the tactical reserve and request additional support from higher headquarters as required.

Likewise, the UW group would manage the aircraft phase and backshop maintenance, including avionics, fuels, and non-destructive investigation. Furthermore, the group's tactical reserve would be the equivalent to two detachments and could be used to reinforce multiple operations. Lastly, the group commander's interaction with the division command element provides insight into the long-term tactical plan so future requirements can be anticipated.

Moreover, the Theater Air Control System transforms from a central command and control construct to a decentralized model. This shifts responsibility for planning and scheduling sorties from the AOC to the detachment commanders. By allowing the detachment commanders to control scheduling and tasking, sorties can flex to meet changes in the ground situation. However, this does not mean that the AOC is not included in the process. Because aircraft must be deconflicted, the detachments must forward sortie information to the AOC for inclusion in the ATO. This is similar to home-station air

operations, where the squadron controls the flying schedule and then submits it to higher headquarters for situational awareness and deconfliction. Therefore, this decentralized model improves the detachment commander's flexibility to meet the ground commander's airpower needs, while providing the AOC with oversight.

Lastly, the UW group would serve as AFCENT's organization for transition from the stability phase to the enable phase. As HN ground forces begin to integrate with U.S. ground forces, the UW squadron could integrate HN pilots into air operations. Therefore, UW pilots must be experienced in a range of training from initial flight instruction through combat employment of the aircraft because the host-nation (as in the case of Iraq and Afghanistan) may not have a foundation or has a very small foundation to build an air force on. This provides U.S. ground forces with the air support required for COIN operations while conventional forces focus on other operations or redeploy to their home base for re-outfitting.

For example, AFCENT deploys a UW group to Iraq to support Task Force Mountain's stability and transition operations. The UW group would be stationed with the 10th Mountain Division, where it would establish a logistics and maintenance hub, liaise with the division command element, and stand up the reserve force. The UW squadrons would forward deploy with the 172nd Infantry Brigade, 20th Armored Brigade, 2nd Brigade Combat Team, and 4th Brigade Combat Team.⁴³ The squadrons would set up their logistics and maintenance depot, integrate with the brigade command elements, and prepare their reserve forces. At the FOBs, the detachments, equipped with MQ-1s, AT-6s, and C-27s,⁴⁴ would integrate themselves into the battalions operations.

As Task Force Mountain transfers control of the southern sector to the Iraqi's, the UW squadron would continue to provide air support to the Iraqi ground forces while training the

IqAF in COIN air operations. This provides the Iraqi ground forces with the air support required to conduct operations effectively and efficiently while the IqAF continues to grow and gain experience. Since the IqAF has purchased the T-6 for pilot training and the AT-6 as a light attack aircraft, IqAF pilot training can be streamlined with Iraqi COIN pilots receiving mission qualification training from their U.S. instructors during actual missions.⁴⁵ This provides a dual-purpose construct that allows the U.S. pilots to provide the Iraqi ground forces with CAS; while simultaneously, teaching Iraqi pilots how to employ their weapon system.

Therefore, the unconventional design uses smaller, more independent units as part of a joint UW team to improve air-ground integration, increase airpower's persistence airpower for stability operations, and establish the conditions that enable the HN to assume responsibility for defense. Hence, this construct provides AFCENT with an operational design that improves airpower's persistence during unconventional warfare operations.

Conclusion

AFCENT's current operational design focuses on conventional warfare. The lessons from the Second World War, Korea, and Desert Storm resonate that centralized command, decentralized execution, and large fighter/bomber air wings are the most effective and efficient method of employing airpower in conventional wars. However, this centralized airpower model is not the most persistent or efficient means of employing airpower during unconventional warfare operations. As demonstrated by the U.S. in Vietnam and the British in Malaya, a conventional airpower construct can provide short-term results, but long-term stability will only occur if the host nation's defense capacity and capability are grown. However, the airpower constructs used by the French in Algeria, the Portuguese in Angola,

and the air commandos in Vietnam and Laos provide a framework for an unconventional operational design.

This joint air-ground UW construct consists of composite squadrons that are based with the supported ground forces. Forward deploying aircraft with ground forces improves air-ground integration and pilot battle-space awareness. Furthermore, composite squadrons operating inside a decentralized command and control organization increases airpower's flexibility and response time. Additionally, a theater or AO tactical reserve provides air commanders with the ability to mass airpower. Lastly, a UW squadron has the capacity and capability to train indigenous forces, which provides a mechanism for transitioning authority to the host nation.

Although AFCENT's current operational design provides ground commanders with continual airpower, it is not the most effective or efficient method of employing airpower during joint UW operations. Furthermore, the current operational design does not include a mechanism for integrating HN forces into stability operations, which hampers transition of authority to the HN and delays the redeployment of U.S. air assets. The limitations of AFCENT's operational design are highlighted by the IqAF's lack of capacity and capability to assume control of the full-spectrum of air operations in August 2010. The solution is for AFCENT to adopt an unconventional warfare construct that provides ground commanders with persistent air support during stability operations; lays the groundwork for foreign internal defense missions; helps transfer defense responsibility to the host nation; and frees up conventional airpower for future engagements.

End Notes

¹ **Stabilize.** The *stabilize* phase is required when there is no fully functional, legitimate civil governing authority present. The joint force may be required to perform limited local governance, integrating the efforts of other supporting/contributing multinational, IGO, NGO, or U.S.G agency participants until legitimate local entities are functioning. This includes providing or assisting in the provision of basic services to the population. Stability operations are necessary to ensure that the threat (military and/or political) is reduced to a manageable level that can be controlled by the potential civil authority or, in noncombat situations, to ensure that the situation leading to the original crisis does not reoccur and/or its effects are mitigated. Joint Publication 5-0, “Joint Operations Planning,” http://www.dtic.mil/doctrine/jel/new_pubs/jp5_0.pdf, p.IV-37.

² **Enable Civil Authority.** This phase is predominantly characterized by joint force support to legitimate civil governance in theater. Depending upon the level of indigenous state capacity, joint force activities during phase VI may be at the behest of that authority or they may be under its direction. The goal is for the joint force to enable the viability of the civil authority and its provision of essential services to the largest number of people in the region. This includes coordination of joint force actions with supporting or supported multinational, agency, and other organization participants; establishment of MOEs; and influencing the attitude of the population favorably regarding the U.S. and local civil authority’s objectives. DOD policy is to support indigenous persons or groups promoting freedom, rule of law, and an entrepreneurial economy and opposing extremism and the murder of civilians. The joint force will be in a supporting role to the legitimate civil authority in the region throughout the *enable civil authority* phase. Joint Publication 5-0, p.IV-37.

³ **Operational design.** The conception and construction of the framework that underpins a campaign or major operation plan and its subsequent execution. Joint Publication 5-0, p.GL-19.

⁴ **Dominate.** The *dominate* phase focuses on breaking the enemy’s will for organized resistance or, in noncombat situations, control of the operational environment. When a campaign or operation is focused on conventional enemy forces, the *dominate* phase normally concludes with decisive operations that drive an adversary to culmination and achieve the JFC’s operational objectives. Against unconventional adversaries, decisive operations are characterized by dominating and controlling the operational environment through a combination of conventional, unconventional, information, and stability operations. Joint Pub 5-0, p.IV-37.

⁵ **Unconventional warfare** — A broad spectrum of military and paramilitary operations, normally of long duration, predominantly conducted through, with, or by indigenous or surrogate forces who are organized, trained, equipped, supported, and directed in varying degrees by an external source. It includes, but is not limited to, guerrilla warfare, subversion, sabotage, intelligence activities, and unconventional assisted recovery. Also called **UW**. Joint Publication 1-02, “Department of Defense Dictionary of Military and Associated Terms,” http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf, p.574.

⁶ Geoffrey Perret, “Winged Victory,” Random House New York, 1993, pp.251-253.

⁷ Warren A. Trest, “Air Commando One,” Smithsonian Institution Press, 2000, p.128.

⁸ Bernard C. Nalty, “Winged Shield, Winged Sword: A History of the USAF, Vol 1,” Air Force History and Museums Program, 1997, p.270.

⁹ James A. Winnefeld and Dana J. Johnson, “Joint Air Operations,” Naval Institute Press, 1993, pp.65-68.

¹⁰ Air Force Doctrine Document 1, “Air Force Basic Doctrine,” Department of the Air Force, 17 September 2003, http://www.dtic.mil/doctrine/jel/service_pubs/afdd1.pdf, p.28.

¹¹ James S. Corum and Wray R. Johnson, “Airpower in Small Wars: Fighting Insurgents and Terrorists,” University of Kansas Press, 2003, p.166.

¹² IBID, p.169.

¹³ IBID, p.284.

¹⁴ Warren A. Trest, p.139.

¹⁵ Warren A. Trest, p.153.

¹⁶ Christopher Bolkcom and Kenneth Katzman, CRS Report for Congress, “Military Aviation: Issues and Options for Combating Terrorism and Counterinsurgency,” January 24, 2005 p.9.

¹⁷ Air Force Doctrine Document 2-3, “Irregular Warfare,” Department of the Air Force, 1 August 2007, p.29.

¹⁸ **Shape.** Joint and multinational operations — inclusive of normal and routine military activities — and various interagency activities are performed to dissuade or deter potential adversaries and to assure or solidify relationships with friends and allies. They are executed continuously with the intent to enhance international

legitimacy and gain multinational cooperation in support of defined national strategic and strategic military objectives. They are designed to assure success by shaping perceptions and influencing the behavior of both adversaries and allies, developing allied and friendly military capabilities for self-defense and coalition operations, improving information exchange and intelligence sharing, and providing U.S. forces with peacetime and contingency access. Joint Pub 5-0, p.IV-35.

¹⁹ 6th Special Operations Squadron, "Fact Sheet,"

<http://www2.hurlburt.af.mil/library/factsheets/factsheet.asp?id=3496>.

²⁰ Charles Townsend, "The Civilization and Frightfulness: Air Control in the Middle East Between the Wars." in Chris Wrigley, ed., *Warfare, Diplomacy and Politics: Essays in Honour of A.J.P. Taylor*. London: Hamish Hamilton, 1986, pp.146-152.

²¹ James S. Corum and Wray R. Johnson, "Airpower in Small Wars: Fighting Insurgents and Terrorists," University of Kansas Press, 2003, p.188.

²² Air University Concept Division, "The Accomplishment of Airpower in the Malayan Emergency (1948-1960)," Aerospace Studies Institute, Air University, 1963, p.50.

²³ Jay G. Simpson, "Not by Bombs Alone: Lessons from Malaya," *Joint Forces Quarterly*, Summer 1999, p.94.

²⁴ Joint Publication 3-09.3, "Joint Tactics, Techniques, and Procedures for *Close Air Support*," 3 September 2003, p.III-26.

²⁵ James S. Corum and Wray R. Johnson, p.194.

²⁶ *IBID*, p.194

²⁷ W.B. Graham and A.H. Katz, "Southeast Asia Trip Report II: The Single Integrated Attack Team," The Rand Corporation, December 1964, p.iii.

²⁸ Field Manual 3-24.2, "Tactics in Counterinsurgency", Department of the Army, March 2009, p.E-4.

²⁹ W.B. Graham and A.H. Katz, p.7.

³⁰ AFDD 2-3, p.24.

³¹ W.B. Graham and A.H. Katz, p.8.

³² *IBID*, p.2.

³³ AFDD 2-3, p.24.

³⁴ Warren A. Trest, p.125.

³⁵ W.B. Graham and A.H. Katz, p.10.

³⁶ Christopher Bolkcom and Kenneth Katzman, p.36.

³⁷ Christopher Bolkcom and Kenneth Katzman, p.36.

³⁸ James S. Corum and Wray R. Johnson, p.169.

³⁹ AFDD 2-3, p. 19.

⁴⁰ FM 3-24.2, p. E-5

⁴¹ Aviation FID includes training and advising foreign aviation forces in the sustained use of airpower for conventional, counterinsurgency, counter narcotics, antiterrorism, and counter poaching operations. Air Force Modernization Planning, "Shaping the Battlefield," AFSOC FY08-33, Draft Mission Area Plan, 1 Dec 2003, Paragraph 2.3.1.2.2.

⁴² A troops-in-contact situation is defined as friendly forces within 1 km of targets. JP 3-09.3, p.D-3.

⁴³ Task Force Mountain Command Structure, <http://www.taskforcemountain.com/unit-profiles>.

⁴⁴ The U.S. Army and U.S. Air Force have purchased the C-27J as part of the Joint Cargo Aircraft Program to provide the warfighter with intratheater airlifts. Air Force Link, "C-27J Spartan named as Joint Cargo Aircraft," 14 June 2007, <http://www.af.mil/news/story.asp?id=123057181>.

⁴⁵ Defense Security Cooperation Agency news release, "Iraq – T-6A Texan Aircraft," 10 December 2008, <http://www.dsca.mil/PressReleases/36-b/2009/09-06.pdf>.

Selected Bibliography

- 6th Special Operations Squadron, "Fact Sheet,"
<http://www2.hurlburt.af.mil/library/factsheets/factsheet.asp?id=3496>
- Air Force Doctrine Document 1, "Air Force Basic Doctrine," Department of the Air Force,
17 September 2003, http://www.dtic.mil/doctrine/jel/service_pubs/afdd1.pdf.
- Air Force Doctrine Document 2-3, "Irregular Warfare," Department of the Air Force,
1 August 2007.
- Air Force Link, "C-27J Spartan named as Joint Cargo Aircraft," 14 June 2007,
<http://www.af.mil/news/story.asp?id=123057181>.
- Air Force Modernization Planning, "Shaping the Battlefield," AFSOC FY08-33, Draft
Mission Area Plan, 1 Dec 2003.
- Air University Concept Division, "The Accomplishment of Airpower in the Malayan
Emergency (1948-1960)," Aerospace Studies Institute, Air University, 1963.
- Bernard C. Nalty, "Winged Shield, Winged Sword, Vol 1," Air Force History and Museums
Program, 1997.
- Charles Townsend, "The Civilization and Frightfulness: Air Control in the Middle East
Between the Wars." in Chris Wrigley, ed., Warfare, Diplomacy and Politics: Essays in
Honour of A.J.P. Taylor. London: Hamish Hamilton, 1986.
- Christopher Bolkcom and Kenneth Katzman, CRS Report for Congress, "Military Aviation:
Issues and Options for Combating Terrorism and Counterinsurgency",
January 24, 2005.
- Defense Security Cooperation Agency news release, "Iraq – T-6A Texan Aircraft,"
10 December 2008, <http://www.dsca.mil/PressReleases/36-b/2009/09-06.pdf>.
- Field Manual 3-24.2, "Tactics in Counterinsurgency", Headquarters Department of the Army,
March 2009.
- Geoffrey Perret, "Winged Victory," Random House New York, 1993.
- James S. Corum and Wray R. Johnson, "Airpower in Small Wars: Fighting Insurgents and
Terrorists, University of Kansas Press, 2003.
- James A. Winnefeld and Dana J. Johnson, "Joint Air Operations," Naval Institute Press, 1993.
- Jay Gordon Simpson, "Not by Bombs Alone: Lessons from Malaya," *Joint Forces Quarterly*,
Summer 1999. p.91.

Joint Publication 1-02, "Department of Defense Dictionary of Military and Associated Terms," 17 October 2008, http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf.

Joint Publication 3-09.3, "Joint Tactics, Techniques, and Procedures for Close Air Support," 3 September 2003, http://www.dtic.mil/doctrine/jel/new_pubs/jp3_09_3ch1.pdf.

Joint Publication 5-0, "Joint Operations Planning," 26 December 2006, http://www.dtic.mil/doctrine/jel/new_pubs/jp5_0.pdf

Task Force Mountain Command Structure, <http://www.taskforcemountain.com/unit-profiles>.

Warren A. Trest, "Air Commando One," Smithsonian Institute Press, 2000.

W.B. Graham and A.H. Katz, "Southeast Asia Trip Report II: The Single Integrated Attack Team," The Rand Corporation, December 1964.